

ENGINEERING DATA LIST

* HISTORY *

DATE	DATA TECH	SOH	ORGN SYMBOL	LGMPM	PR NR	APPLICATION	PAGE	OF
19APR01						C-5A/B	1	1
CAGE: 98897	MANUFACTURER NAME: LOCKHEED MARTIN			REFERENCE NR: 4G14563-101A	NOUN: PISTON, LINEAR ACTUA		NSN: 1650011327337LE	
CAGE	DRAWING NUMBER	REV	NR SHEETS	NR CARDS	FURN CODE	DIST CODE	NOUN	REQUIREMENTS
98897	4G14563	/	0001	0000	S		CYLINDER ASSY.	
98897	4G13704	/ A	0001	0000	S		FILTER.	
98897	4G14560	/	0001	0000	S		KEY.	
98897	4G14564	/ B	0001	0000	S		CAP.	
98897	4G14565	/ A	0001	0000	S		COVER.	
98897	4G14566	/ C	0001	0000	S		CYLINDER.	
98897	4G14567	/	0001	0000	S		ROD.	
98897	4G14568	/	0001	0000	S		NUT.	
98897	4G14569	/	0001	0000	S		SPRING.	
98897	4G14570	/	0001	0000	S		PLATE.	
98897	4G14571	/	0005	0000	S		ACCEPTANCE TEST.	
98897	STSKG200	/ K	0008	0000	S		ROD END.	DWG IS AT WR-ALC
98897	LAC 0701	/	0000	0000	S		MACHINING SPEC.	
98897	STP 63-204	/	0000	0000	S		FABRICATE.	
98897	STM 40-111	/	0000	0000	S		ASSEMBLE.	
98897	DS 30001	/	0000	0000	S		DIMENSIONALLY INSPECT.	
98747	00-ALC/LGMPM	/ A	0003	0000	S		ENGRG. DATA REQTS. (ATCH "A:)	

STANDARD ENGINEERING TEXT

ENGINEERING DATA LIST REMARKS

FURNISHED METHOD CODE LEGEND:
 X - DATA SUPPLIED (NOT IN EDCARS). G - GOV'T DOCUMENT.
 R - FURNISHED BY PCD UPON REQUEST. O - OTHERS, CONTRACTOR
 C - CLASSIFIED DOCUMENT. P - PARTIAL DOCUMENT FURNISHED. MUST ACQUIRE
 S - FURNISHED WITH SOLICITATION.

REV

A

ENGINEERING DATA REQUIREMENTS

(ATTACHMENT "A")

NOTE: MILITARY SPECIFICATIONS /STANDARDS WILL NOT BE FURNISHED IN THE BID SET.

1. THE FOLLOWING INSTRUCTIONS ARE FURNISHED FOR THE MANUFACTURE OF

CYLINDER ASSEMBLY - EMER LOCK STRUT.

2. PART NUMBER

4G14563-101A

3. NATIONAL STOCK NUMBER

1650 01 132 7337 LE

4. THE FOLLOWING SPECIFICATIONS/STANDARDS, ETC., WILL BE USED IN LIEU OF THE DATA INDICATED. THE SUPERSEDED DATA WILL NOT BE FURNISHED UNLESS SO INDICATED.

- a. Identify per MIL-STD-130, in lieu of STP 63-001. According to drawing requirements.
 - b. Machine per LAC 0701, in lieu of DS30003.
 - c. Safety wire per MS33540, in lieu of DS 30011.
 - d. Threads per MIL-S-8879, SAFETY CRITICAL THREADS. (Ref. drawing 4G14564)
 - e. Penetrant inspect per ASTM E1417, Type I, Level 3 or 4, Method B or C, in lieu of STP 53-201. This part shall conform to grade A quality level classification as specified in MIL-STD-1907. The inspector performing the inspection will be certified to level II, with the inspection procedures developed by a level III, as specified in NAS-410. (Ref. drawings 4G14564, 4G14566, and 4G14569)
 - f. Magnetic particle inspect per ASTM 1444, in lieu of STP 53-001, fluorescent type, full wave direct current (FWDC), and wet continuous method. This part shall conform to grade A quality level classification as specified in MIL-STD-1907. The inspector performing the inspection will be certified to level II, with the inspection procedures developed by a level III, as specified in NAS-410.
 - g. Heat treat and precipitation harden per SAE AMS-H-6875, in lieu of STP 54-019, and STP 54-013.
 - h. Shot peen per SAE AMS-S-13165, in lieu of STP 51-501.
 - i. Forge and inspect per SAE AMS-A-22771, in lieu of STM 05-101. (Ref. drawing 4G14566-991A)
 - j. Use material 4140 steel per AMS 6382, in lieu of MIL-S-5626. (Ref. drawing 4G14567)
 - k. Inspect casting per SAE AMS-STD-2175, in lieu of MIL-C-6021.)Ref. drawings 4G14561, and 4G14565)
 - l. Use material per ASTM B209, in lieu of QQ-A-250/1. (Ref. drawing 4G14570)
5. Finish per the following in lieu of DS 30000, finish codes AA, C, D, M, Y, 17, 54, and 74-74.
- a. Anodize per MIL-A-8625, Type II, Class 1. (code AA) (Ref. drawing 4G14566)
 - b. Cadmium plate per MIL-STD-870, Class 2, Type II. (code C) (Ref. drawing 4G14565 and 4G14568)
 - c. Chromium plate per MIL-C-1501, Class 1, Type I or II. (code D) (Ref. drawing 4G14567)

PREPARED BY

ORIN HATCH

SYMBOL

TIEPMA

DATE

10 APR 2001

REV: A	ENGINEERING DATA REQUIREMENTS (ATTACHMENT "A")	
<i>NOTE: MILITARY SPECIFICATIONS /STANDARDS WILL NOT BE FURNISHED IN THE BID SET.</i>		
1. THE FOLLOWING INSTRUCTIONS ARE FURNISHED FOR THE MANUFACTURE OF CYLINDER ASSEMBLY - EMER LOCK, STRUT		
2. PART NUMBER 4G14563-101A	3. NATIONAL STOCK NUMBER 1650 01 132 7337 LE	
4. THE FOLLOWING SPECIFICATIONS/STANDARDS, ETC., WILL BE USED IN LIEU OF THE DATA INDICATED. THE SUPERSEDED DATA WILL NOT BE FURNISHED UNLESS SO INDICATED.		
<ul style="list-style-type: none"> d. Passivate per SAE AMS-QQ-P-35, Type optional. (Ref. drawing 4G14569) e. Nickel plate per QQ-N-290, Class II, Grade F. (code Y) (Ref. drawing 4G14567) f. Primer wash is not required. (code 17) g. One coat of epoxy primer per MIL-PRF-85582, Type I, Class 2. (code 54) Alternate, One coat of epoxy primer per MIL-PRF-23377, Type I. h. Two coats of top coat per MIL-PRF- 85285, Type I. (color white No. 17925 per FED-STD-595) (code 74-74) <p>6. The required castings will be procured from the qualified casting source using the original certified casting procedures and tools.</p> <ul style="list-style-type: none"> a. Prior to contract award the detail part bidder will provide certification, from the casting source, to the government that the certified tooling and casting procedures are available and that the casting source has an agreement with the detail part bidder to provide castings for their use in the event they are the successful bidder. b. Prior to production, casting lot qualification will be accomplished as specified on the casting drawing and MIL-STD-2175. The contractor will assure that this is or has been accomplished by the casting source and will submit certified documentation of accomplishment to the government. 		
7. CASTING SOURCE, CONTROL, AND LOCATION OF TOOLS:		
<ul style="list-style-type: none"> a. Casting drawing: 4G14564-991A, and 4G14565-991A. Lockheed GA. (98897 CAGE) b. Control of casting process: Unknown. c. Location of casting tooling: Unknown. 		
8. INSTRUCTIONS FOR QUALIFICATION OF NEW CASTING SOURCE:		
<ul style="list-style-type: none"> a. Prior to contract award the contractor will advise the government in writing of their intent to procure new casting tooling, and the proposed casting source. The contractor will not proceed to obtain new tooling without express consent of the government procuring agency. The government will have unlimited use of the tooling developed under this contract. The contractor will inform the casting house in writing, at the same time the order for the tooling is placed, that the government has unlimited use rights of the tooling and forward a copy of this letter to the contracting officer. 		
PREPARED BY ORIN HATCH	SYMBOL TIEPMA	DATE APR 23 2001

REV: A	ENGINEERING DATA REQUIREMENTS (ATTACHMENT "A")	
NOTE: MILITARY SPECIFICATIONS / STANDARDS WILL NOT BE FURNISHED IN THE BID SET.		
1. THE FOLLOWING INSTRUCTIONS ARE FURNISHED FOR THE MANUFACTURE OF CYLINDER ASSEMBLY - EMER LOCK, STRUT.		
2. PART NUMBER 4G14563-101A	3. NATIONAL STOCK NUMBER 1650 01 132 7337 LE	
4. THE FOLLOWING SPECIFICATIONS / STANDARDS, ETC., WILL BE USED IN LIEU OF THE DATA INDICATED. THE SUPERSEDED DATA WILL NOT BE FURNISHED UNLESS SO INDICATED.		
9. The required forgings will be procured from the qualified forging source using the certified forging procedures and dies. a. Prior to contract award the detail part bidder will provide certification, from the forging source, to the government that the certified dies and forging procedures are available and that the forging source has an agreement with the detail part bidder to provide forgings for their use in the event they are the successful bidder. b. Prior to production, forging lot qualification will be accomplished as specified on the forging drawing and MIL-F-7190, the contractor will assure that this is or has been accomplished by the forging source and will submit certified documentation of accomplishment to the government.		
10. FORGING SOURCE, CONTROL, AND LOCATION OF DIES: a. Forging drawing: 4G14566-991A, Lockheed GA. (98897 CAGE) b. Control of casting process: Unknown. c. Location of forging dies: Unknown.		
11. INSTRUCTIONS FOR QUALIFICATION OF NEW FORGING SOURCE: a. Prior to contract award the contractor will advise the government in writing of their intent to procure new forging dies and the proposed forging source. The contractor will not proceed to obtain new dies without express consent of the government procuring agency. The government will have unlimited use of the dies developed under this contract. The contractor will inform the forging house in writing, at the same time the order for the dies is placed, that the government has unlimited use rights of the dies and forward a copy of this letter to the contracting officer.		
12. The following specifications are not required for the manufacture of this item. a. ER 8094		
13. STSKG200 is a source control drawing, the part must be procured from a qualified source listed on the drawing.		
PREPARED BY ORIN HATCH	SYMBOL TIEPMA	DATE 19 APR 2001

SOURCE QUALIFICATION REQUIREMENTS
(PL 98-525, SECTION 2319)

STOCK NR (NSN) 1650-01-132-7337LE
NOUN: Cylinder Assembly-Emergency Lock

PART NUMBER (P/N) 4G14563-101A
AIRCRAFT: C-5

SECTION C

QUALIFICATION REQUIREMENTS THAT MUST BE SATISFIED TO BECOME A QUALIFIED SOURCE

1. Because of the need for uninterrupted item support to military aircraft systems and in keeping with the requirements of PL 98-525, the current acquisition need not and generally will not be delayed to provide an offerer an opportunity to qualify. Normal acquisition practices at OO-ALC should preclude the denial of opportunity to any interested offerer.
2. The offerer must provide a pre-contract award qualification article, which meets the requirements of the engineering drawings, material specifications, and process specifications. However, successful completion of the qualification testing does not guarantee any contract award. If the offerer is deemed qualified and awarded the contract, a post-contract award first article exhibit may be required to verify production capability.
3. The required materials will be procured from a qualified source and will meet the requirements of their respective specifications. The offerer will assure that the material supplier has accomplished this and will submit certified documentation of accomplishment of the above requirements to the purchaser along with the pre-contract award qualification article.
4. The qualification article shall demonstrate full compatibility and comparability with existing parts, and once submitted, will be subjected to such testing as deemed necessary by the government, to insure the article meets all dimensional, processing, and functional requirements. Such testing may result in the destruction of the article. Following completion of necessary testing and evaluation, the article, no matter what its condition, shall be returned to the contractor or disposed of at his discretion and direction, whether it was found acceptable or not.
5. Form verification: The Government's Quality Verification Center will verify compliance with dimensional data requirements. Material and process compliance will also be verified as required.
6. Fit/function verification: Existing components and Government test stands/fixtures will be utilized to verify physical interface and functional performance of articles.
7. Testing for material and process compliance
 - (a) Material analysis
 - (b) Heat treat
 - (c) Grinding
 - (e) Plating
 - (f) Finish
 - (g) Other
8. Remarks:
 - a. Organic verification capabilities exist at OO-ALC.
 - b. Test requirements outside organic capabilities will be contracted out to independent laboratories.
9. The estimated cost of government testing and evaluation is \$5000
10. Maximum time for testing of the qualification article will not exceed 30 days from receipt at testing agency.